

Appl. No. 10/657,273  
Amendment dated: October 30, 2006  
Reply to OA of: August 24, 2006

### **REMARKS**

Applicants have amended the specification and claims to more particularly define the invention taking into consideration the outstanding Official Action and to make the specification complete and provide full support for the claimed subject matter. In this regard, the specification has been amended at page 5 to add the subject matter of claims 1-6 to the specification. This does not introduce new matter since the original claims form part of the specification as originally filed and this amendment simply provides support in the specification for the subject matter of claims 1-6. Accordingly, entry of this amendment is most respectfully requested.

Applicants appreciate that the subject matter of claims 1-6 is no longer claimed in the application but has been canceled from the claimed subject matter in view of the restriction requirement. Applicants reserve all rights to filing one or more divisional applications directed to the withdrawn subject matter.

In addition, claim 7 has been amended as suggested by the Examiner and further dependent claims to specific combinations as fully supported by the specification have been included in claims 8-10.

Applicants most respectfully submit that all of the claims now present in the application are in full compliance with 35 USC 112 and are clearly patentable over the references of record.

The rejection of claim 7 under 35 U.S.C. 112, first paragraph, has been carefully considered. While Applicants do not agree with the conclusion reached in the Official Action, the claims have been amended in accordance with the Examiner's suggestion and the specific metals have been listed in the claims thereby obviating this aspect of the rejection. Accordingly, it is most respectfully requested that this rejection be withdrawn.

The rejection of claim 7 under 35 U.S.C. 103(a) as obvious over Lowry has been carefully considered but is most respectfully traversed in view of the amendment to claim 7 and the added claims dependent thereon. As noted on page 2 of Applicants' specification, the present invention takes advantage of the characteristics that the

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effective charge numbers of different metals have different values and even with different signs, and alloys are prepared with the metals of different signs of effective charge number in accordance with the information provided in the specification and claims.

As stated in the paragraph bridging pages 2 and 3 of the Official Action since the alloy formed with the constituent metals is not necessarily an ideal solution, the actually effective charge number of the alloy may slightly deviate from the value calculated according to the above formula of the ideal solution. However, such a deviation will not reduce the value of the present invention. The present invention not only can be used to design an alloy that is electromigration effect-free or electromigration effect-insignificant, e.g. the absolute value of  $z$  being smaller than 1, preferably smaller than 0.1, but also can be used to design an alloy having a particular electromigration property.

There is nothing in the prior art which suggests the above procedure which includes a calculating but it is an integral part of the invention which is necessary to obtain the results of the invention. Claim limitations cannot simply be ignored and these limitation are clearly not suggested by the prior art.

The Lowry reference relates to alloys and more particularly to alloys containing cobalt and nickle that have superior physical and chemical properties and to processes of preparing the same. As noted in column 1 of the patent, an object of the invention is to provide an alloy that has a high tensile strength and a high proportional (elastic) limit at elevated temperatures.

As stated at column 2 of the patent, line 30, numerous experiments were made with alloys of different metals and patentee has discovered that the metals of the iron group are apparently the only ones which meet all of the above requirements. The improved alloy comprises nickel, cobalt, iron and additional ingredients capable of increasing the mechanical properties which may also act as a deoxidizer, such as titanium, tungsten, manganese, vanadium or molybdenum. There is absolutely no suggestion of the method inclusive of the metals set forth in the dependent claims now present in the application. Moreover, the suggestion of the presently claimed method

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is not contained in the prior art nor would it be rendered obvious by one of ordinary skill in the art to which the invention pertains. Accordingly, it is most respectfully requested that this rejection be withdrawn.

In view of the above comments and further amendments to the specification and claims, favorable reconsideration and allowance of all the claims now present in the application are most respectfully requested.

Respectfully submitted,

BACON & THOMAS, PLLC

By: Richard E. Fichter  
Richard E. Fichter  
Registration No. 26,382

625 Slaters Lane, Fourth Floor  
Alexandria, Virginia 22314  
Phone: (703) 683-0500  
Facsimile: (703) 683-1080  
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A01.wpd  
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